



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:)	
)	Group Art Unit: 2153
Hochmuth, et al.)	
)	Examiner: Patel, Ashokkumar B.
Serial No.: 09/941,254)	
)	Confirmation No. 6013
Filed: August 27, 2001)	
)	HP Docket No.: 10007641-1
For: System and Method for Communicating)	TKHR Docket: 50819-1360
Graphics Images over a Computer Network)	

DECLARATION UNDER U.S.C. §1.131

1. We, Roland M. Hochmuth, John Marks, and Robert Paul Martin, employees of Hewlett-Packard Company, are the inventors of the subject matter disclosed and claimed in Serial No. 09/941,254 (hereafter the “‘254 application”).
2. We are advised that claims of the ‘254 application have been rejected by the U.S. Patent & Trademark Office, based on teachings from U.S. provisional application 60/291,130, which was filed on May 17, 2001 (hereafter “the ‘130 application”).
3. We are further advised that this ‘130 application is not proper “prior art” to the invention of the ‘254 application, as we “invented” our invention before the filing date of the ‘130 application.
4. In this regard, we are further advised that we “invented” our invention before the filing date of the ‘130 application if we conceived of the subject matter that is claimed, and if we diligently pursued this subject matter until the filing date of our ‘254 application. As we understand these legal standards, we submit that the ‘130 application should not be “prior art” to the claims of our ‘254 application.
5. In this regard, we conceived the subject matter of the ‘254 application before the May 17, 2001 filing date of the ‘130 application, as reflected in an invention disclosure form that we submitted to Hewlett-Packard Company. A redacted copy of this disclosure form is attached hereto as **Exhibit A**. This document has been redacted to remove submission and revision dates. This document was submitted to Hewlett-Packard Company for

consideration prior to May 17, 2001 (which pre-dates the filing of the '130 application being relied upon by the Office Action to reject our claims).

6. The presently pending claims in our '254 application are clearly supported by the text and drawings that form a part of this invention disclosure form (Exhibit A), which verifies that the subject matter of the '254 application was conceived prior to May 17, 2001.
7. Upon information and belief, this invention disclosure form was thereafter considered by the Hewlett-Packard Company legal department, for the purpose of determining whether a patent application should be pursued.
8. On information and belief, Hewlett-Packard Company requested the outside law firm of Thomas, Kayden, Horstemeyer & Risley, LLP to prepare a patent application to cover the subject matter of our invention disclosure. A redacted copy of a letter so instructing Daniel R. McClure (one of the attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP) is attached hereto as **Exhibit B**. This letter was sent to Daniel R. McClure before the May 17, 2001 filing date of the '130 application.
9. On information and belief, shortly thereafter Daniel R. McClure began the preparation of this '254 application. This entailed direct discussions with the Roland Hochmuth to gain an understanding of embodiments of our invention, before Daniel R. McClure prepared the first draft of the '254 application.
10. On or about May 21, 2001, Daniel R. McClure completed a first draft of the patent application for our review. Indeed, between the dates of May 21, 2001 and June 19, 2001, this application went through multiple iterations of review and revision. Attached hereto as **Exhibit C** is a redacted email string between Daniel R. McClure and Roland Hochmuth sending draft applications and review/revision comments back and forth between these dates.
11. Upon information and belief, after providing our comments on a second draft, a decision was made to commission an outside search firm to perform a prior art search on certain features of embodiments of our invention, and on or about June 27, 2001, Daniel R. McClure formally commissioned such a search. A redacted copy of a letter so instructing the search firm of "Patent Providers" is attached hereto as **Exhibit D**.

12. Upon information and belief, this search was completed on or about July 11, 2001. A redacted copy of a reporting letter from the Patent Providers search firm, memorializing the results of this search is attached hereto as **Exhibit E**.
13. Thereafter, we reviewed the patents found in this search, in the context of the '254 application.
14. Attached hereto as **Exhibit F** are a redacted copies of emails sent to Daniel R. McClure from Roland Hochmuth (dated July 24, 2001), which provide additional comments about the '254 application, in view of the references identified in the search.
15. Shortly thereafter, Daniel R. McClure completed a revision of the patent application, which was approved by each of us.
16. Upon information and belief, after we approved of the contents of the application, the application was sent to L.Joy Griebenow (an in-house attorney of Hewlett-Packard Company), who was responsible for overseeing this application.
17. Upon information and belief, L.Joy Griebenow reviewed the application and provided comments for Daniel R. McClure, which led to additional revisions.
18. On or about August 21, 2001, Daniel R. McClure sent a further revised application to us for our review and comment. On or about August 22, 2001, we had reviewed this revised draft and approved of its filing with the United States Patent & Trademark Office. A redacted copy of an email string embodying this exchange is attached hereto as **Exhibit G**.
19. Thereafter, we were provided with formal papers for execution, and this application was filed with the United States Patent & Trademark Office on August 27, 2001.

We hereby declare: (a) that all statements made herein of our own knowledge are true; (b) that all statements made on information and belief are believed to be true; (c) that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and (d) that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date

Roland M. Hochmuth

Date

John Marks

Date

Robert Paul Martin



Serial No: 09/941,254
HP-Ref: 10007641-1

We hereby declare: - (a) that all statements made herein of our own knowledge are true; (b) that all statements made on information and belief are believed to be true; (c) that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and (d) that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

5/16/2006
Date

Roland M. Hochmuth
Roland M. Hochmuth

5/8/2006
Date

John Marks
John Marks

5/10/2006
Date

Robert Paul Martin
Robert Paul Martin



INVENTION DISCLOSURE

PDNO

10007641

DATE

REDACTED

PAGE ONE OF 8

ATTORNEY

KMH

Instructions: The information contained in this document is **COMPANY CONFIDENTIAL** and may not be disclosed to others without prior authorization. Submit this disclosure to the HP Legal Department as soon as possible. No patent protection is possible until a patent application is authorized, prepared, and submitted to the Government.

Descriptive Title of Invention:

Internet Graphics Appliance

Name of Project:

Scalable Computing Systems

Product Name or Number:

e-utilica

COPY

Was a description of the invention published, or are you planning to publish? If so, the date(s) and publication(s):

No.

Was a product including the invention announced, offered for sale, sold, or is such activity proposed? If so, the date(s) and location(s):

No.

Was the invention disclosed to anyone outside of HP, or will such disclosure occur? If so, the date(s) and name(s):

No.

If any of the above situations will occur within 3 months, call your IP attorney or the Legal Department now at 1-898-4919 or 970-898-4919.

Was the invention described in a lab book or other record? If so, please identify (lab book #, etc.)

Robert Paul Martin, one of the inventors listed, disclosed significant prior art to HP Labs on REDACTED using a Power Point Slide Set. The Slide Set is attached to this Invention Disclosure.

Was the invention built or tested? If so, the date:

No. However, the invention is in the project proposal stages.

Was this invention made under a government contract? If so, the agency and contract number:

No.

Description of Invention: Please preserve all records of the invention and attach additional pages for the following. Each additional page should be signed and dated by the inventor(s) and witness(es).

- A. Description of the construction and operation of the invention (include appropriate schematic, block, & timing diagrams; drawings; samples; graphs; flowcharts; computer listings; test results; etc.)
- B. Advantages of the invention over what has been done before.
- C. Problems solved by the invention.
- D. Prior solutions and their disadvantages (if available, attach copies of product literature, technical articles, patents, etc.).

Signature of Inventor(s): Pursuant to my (our) employment agreement, I (we) submit this disclosure on this date: |

REDACTED

311849	Roland Hochmuth		898-4121 74	40ES/7221, TSL
Employee No.	Name	Signature	Telnet Mailstop	Entity & Lab Name
311565	John Marks		898-6867 74	40ES/7221, TSL
Employee No.	Name	Signature	Telnet Mailstop	Entity & Lab Name
311057	Robert Paul Martin		898-2368 59-6LP4	40ES/7221, TSL
Employee No.	Name	Signature	Telnet Mailstop	Entity & Lab Name
Employee No.	Name	Signature	Telnet Mailstop	Entity & Lab Name

(If more than four inventors, include additional information on another copy of this form and attach to this document)

REDACTED

Description

This invention describes an Internet Graphics Appliance (IGA) that is attached to the video output of a graphics adapter on a source compute node. Figure 1 shows a diagram of how the invention could be used in a network topology. The IGA compresses and converts the video output into a sequence of IP (Internet Protocol) packets or some other network protocol. Some video frames may be dropped since the network bandwidth may not be sufficient enough or the destination compute node may not be able to keep up with the refresh rate that the source graphics device is set to. The video output may be preferably a digital signal as in a digital video interface (DVI) or analog signal. The IP packets are then sent to a destination compute node on the network. The destination compute node receives the IP packets from the IGA, decompresses them, assembles the image, and then displays the results in a window on the compute node's display device. The decompression, assembly, and display of the image can be implemented in a software client written as a JAVA program, JAVA applet, native implementation, or some other method running on the destination compute node. The software client may optionally control the IGA by configuring the refresh rate, window size on the destination compute node or other parameters. Hardware assist may also be used on the destination compute node, but this is not described here.

Another way to think about this is, instead of a monitor being attached to the video output of the source compute node an RGB-to-IP converter is attached. This converter can compress and transmit the output to one or more destination IP addresses. A scenario in which a one-to-many conversion may be interesting is to allow multiple users to simultaneous view the same graphics display for the purpose of collaborative computing.

The IGA consists of one or more video input ports, either analog or digital, one or more DSPs or similar low-cost, high-performance embedded controller, CPU or custom chip, one or more Ethernet ports or similar network interface ports, RAM, and other miscellaneous parts. The video input device plugs into the video output of the graphics port on the source compute node. The CPU or DSP compresses the video signal and encapsulates the data in IP or other network protocol. The packets are then sent out the network interface port. The appliance may include other ports such as RS-232 or power.

In Figure 1 the source compute node at IP address 10.10.1.2 sends video images using the video out port to the IGA at IP address 10.10.1.3. The IGA compresses the video image and converts it to network packets. The network packets are sent to the destination compute node. The destination compute node reads the incoming network packets, decompresses the image and displays it using a GUI written in a language such as JAVA.

In Figure 2 the source compute nodes at IP address 10.10.1.2 and 10.10.1.4 send video images using the video out port to the IGA at IP address 10.10.1.3. The IGA compresses both video images and converts it to network packets. The network packets are sent to the destination compute nodes. The destination compute node reads the incoming network packets, decompresses the images, and displays them using a GUI written in a language such as JAVA.

Figure 3 shows one embodiment of the IGA. The video input unit accepts input from the video output port from a graphics display adapter. The compression unit gets the image from the video input unit and compresses the data. Next, the network interface unit encapsulates the compressed data into network packets and sends the data out the network interface. A client running on the destination compute node can be used to control the IGA through the network interface. Parameters that may be controlled include, frames per second transmitted, pixel depth, display resolution and others.

Figure 4 is a slide that Robert Paul Martin presented on September 19, 1999 to HP Labs. The complete slide set is attached to this invention disclosure. The functionality shown in this figure in the block labeled FB/Compressor/Net Interface is similar to the functionality described in Figure 3.

Advantages

1. Platform independent: No low-level OS or device driver changes are required on the source compute node. Completely OS and hardware independent. This technique should work with all of today's current graphics technologies independent of operating system.
2. No additional computational overhead on the source compute node. Traditional screen scraping techniques involve significant computation in the color space coalescing conversion and compression stage.
3. No additional memory or I/O overhead. Current screen scraping techniques involve reading the frame-buffer back into system memory, compressing and assembling the IP packets, and then sending the IP packets to the destination compute node. The process of reading the frame-buffer back into system memory and sending the IP packets to the destination compute node impact the I/O and memory sub-systems.
4. Easy to install. Since the IGA is a network appliance the device can be installed with little or no changes necessary to the source compute node.

Problems Solved by This Invention

1. Remote display of a graphics device.
2. No OS specific device driver's necessary. The solution described here applies to all operating systems.
3. The graphics refresh rate on the client side is bounded based on the network bandwidth, screen resolution, pixel depth, and computational rate at which images can be compressed and decompressed. The display of complex 3-D graphics images using 3-D protocol based methods is unbounded since the 3-D data set is unbounded.

Prior solutions and their disadvantages

1. OS dependent code that operates at the device driver layer must be written to control the device.
2. Read back of frame-buffer, color space coalescing conversion, compression, and transmittance of IP data requires CPU processing and I/O bandwidth.

Variations

This section describes variations on the invention described above.

1. The functionality embodied in the IGA can be integrated onto a graphics adapter either using a separate chip or in the graphics chip. An ideal point to implement this functionality would be at the point that the RAM/DAC is traditionally located in a graphics chip.
2. The functionality described in the IGA can be integrated onto a PCI based board that plugs into the source compute node. This would solve the power requirements for the appliance. The PCI board would accept video input from the video output of the graphics device. A DSP on the PCI board would compress and convert the data to some IP based protocol. The IP would be sent on a network interface port.

3. The functionality embodied in the IGA can be embodied into an appliance that has multiple video input feeds and one or more network interface ports. A diagram of this is shown in Figure 2. In this variation, one or more video outputs are fed into the IGA, which then converts and sends the display onto one or more destination IP addresses.
4. The functionality embodied in the IGA can be embodied into a block of code, such as Verilog, and sold to a graphics chip design company to be implemented similarly to variation 1. listed above.

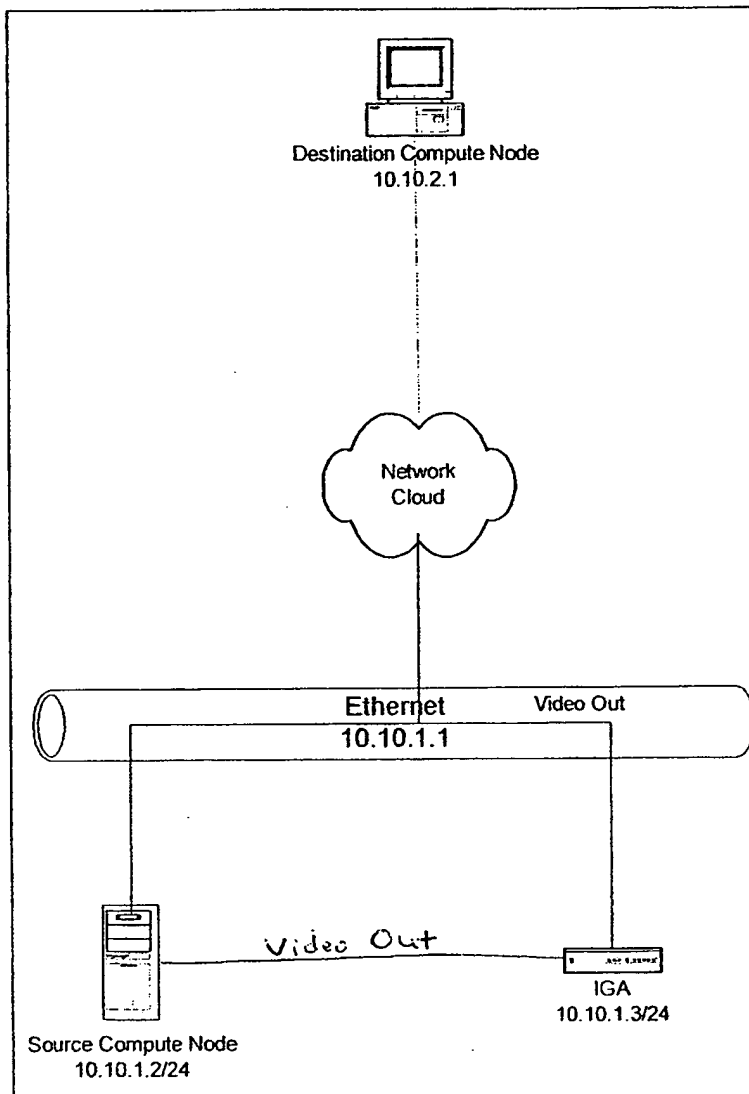


Figure 1

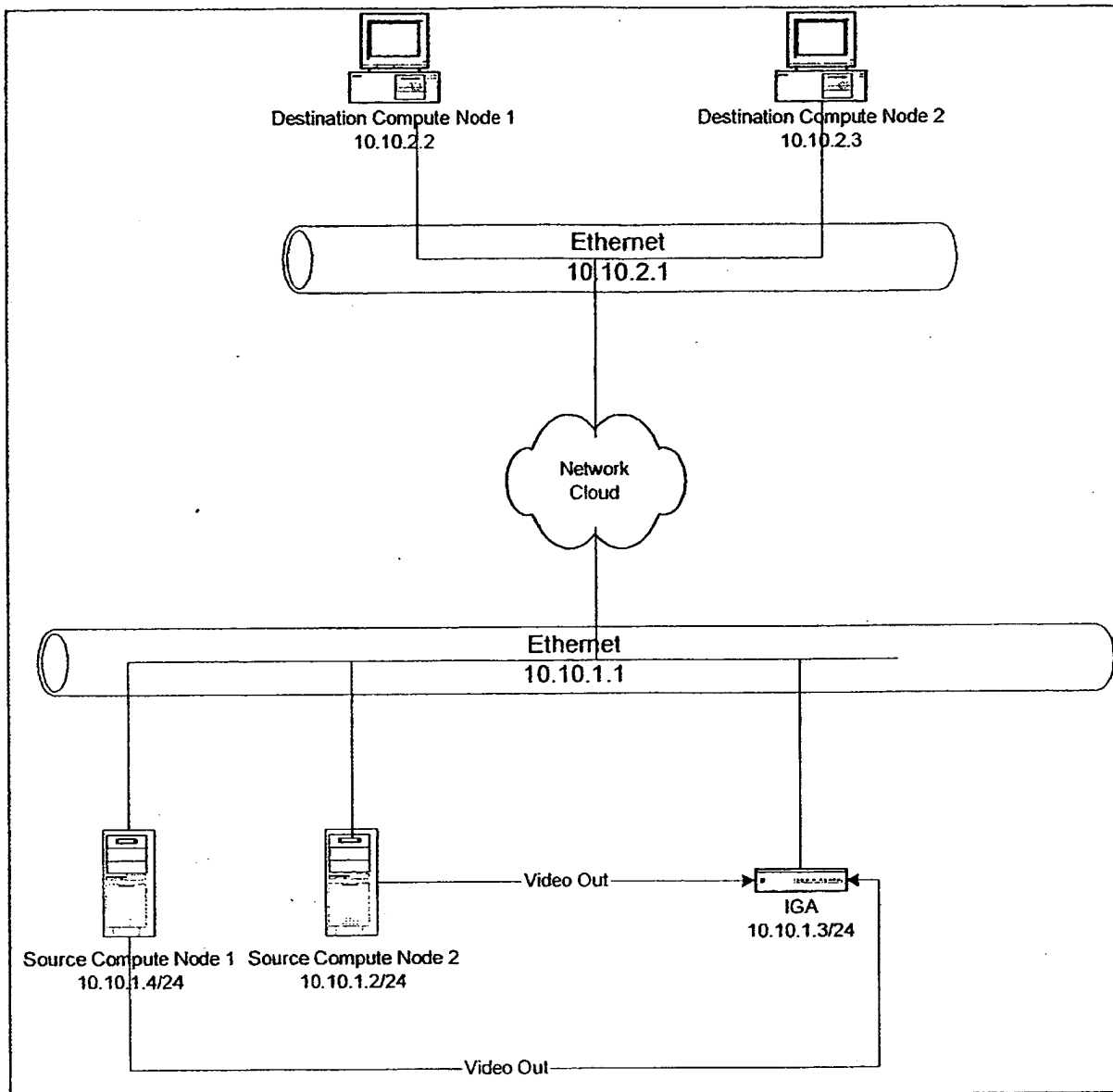


Figure 2

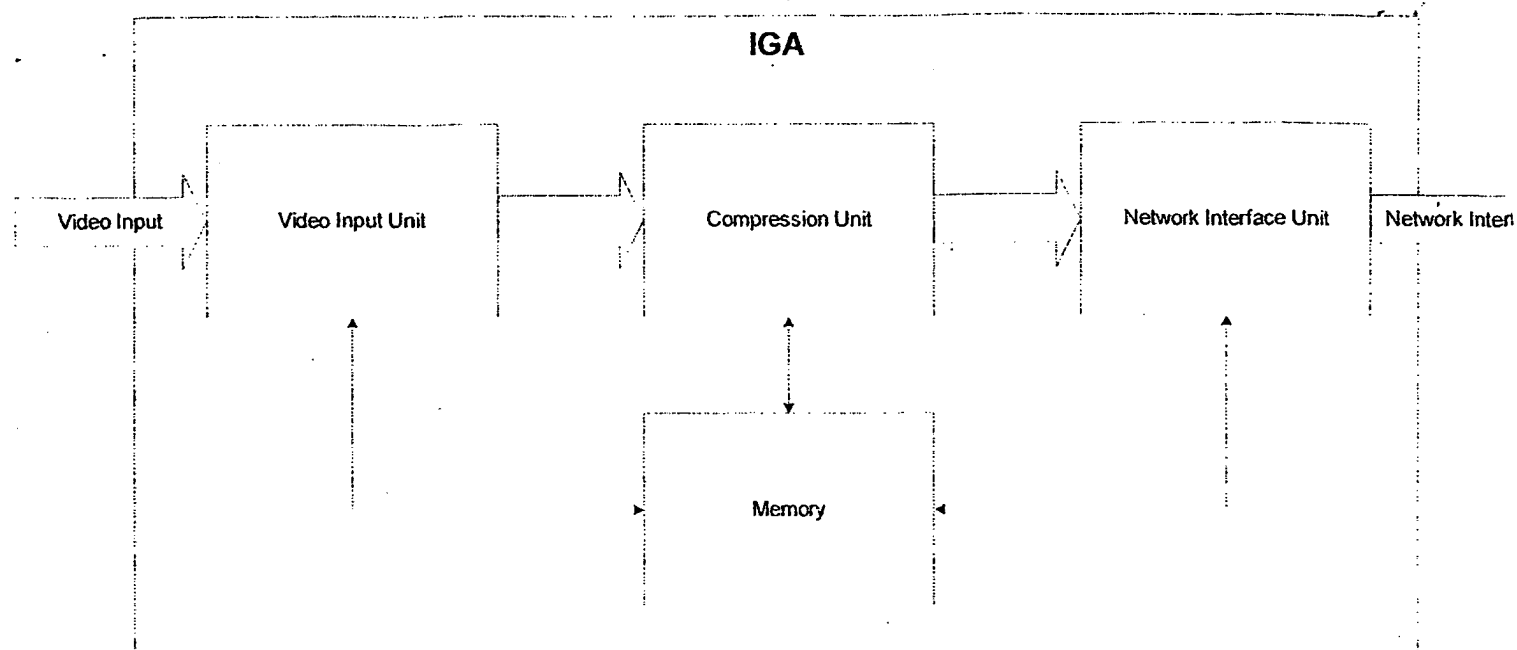


Figure 3

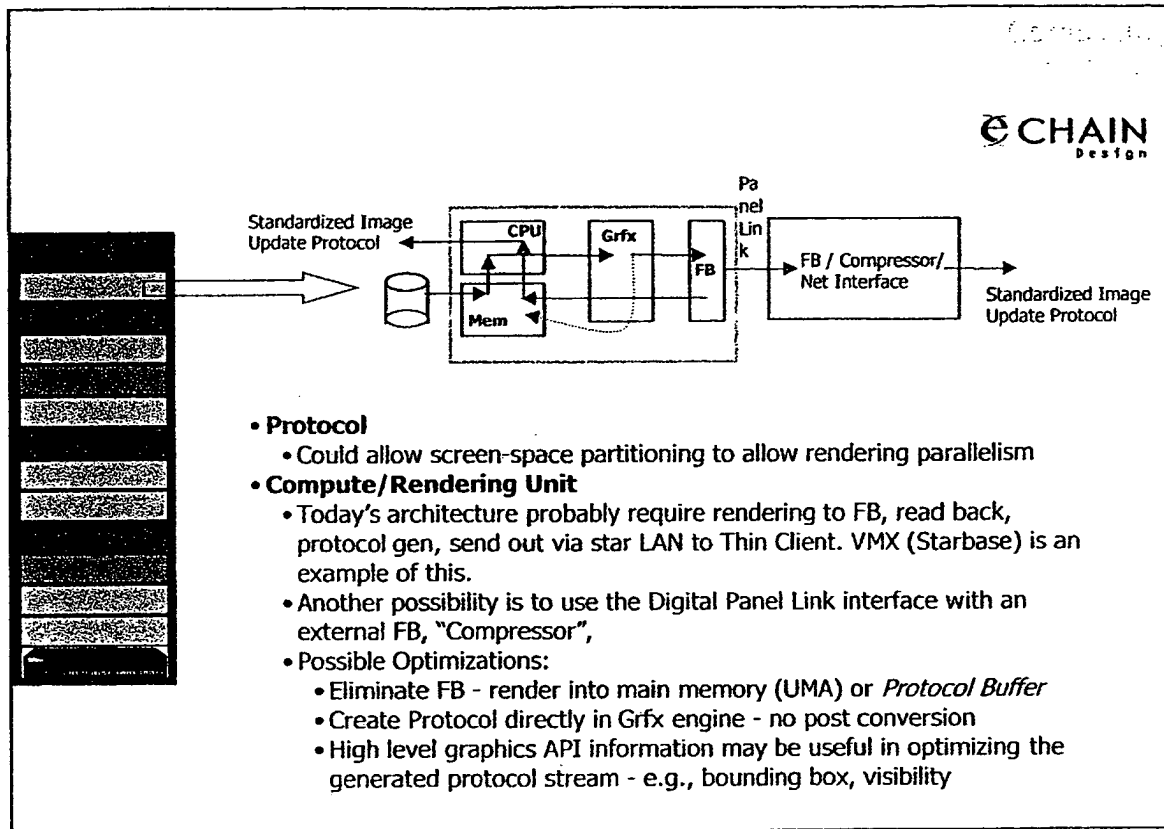
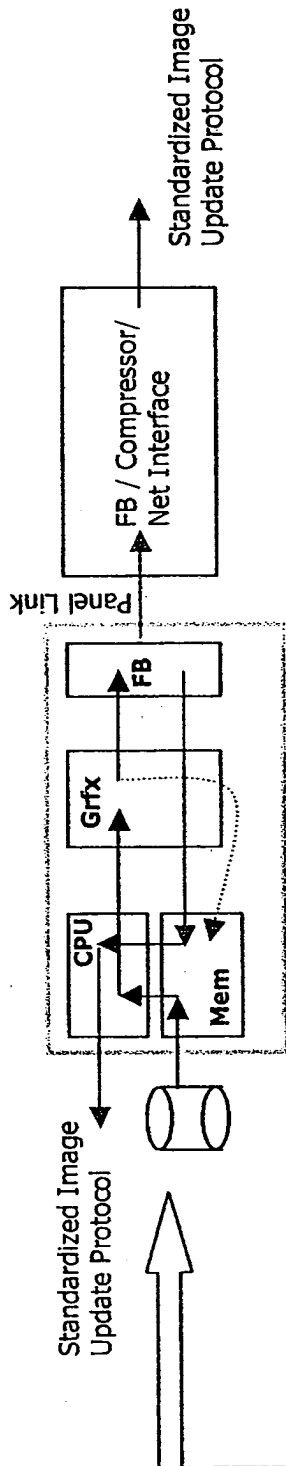


Figure 4



• Protocol

- Could allow screen-space partitioning to allow rendering parallelism

• Compute/Rendering Unit

- Today's architecture probably require rendering to FB, read back, protocol gen, send out via star LAN to Thin Client. VMX (Starbase) is an example of this.
- Another possibility is to use the Digital Panel Link interface with an external FB, "Compressor",
- Possible Optimizations:
 - Eliminate FB - render into main memory (UMA) or *Protocol Buffer*
 - Create Protocol directly in Grfx engine - no post conversion
 - High level graphics API information may be useful in optimizing the generated protocol stream - e.g., bounding box, visibility



Hewlett-Packard Company
Fort Collins Legal Department
Intellectual Property Section - MS79
3404 East Harmony Road
Fort Collins, CO 80528-9599
www.hp.com

Kevin Hart
PATENT ATTORNEY

970 898 7057 Tel
970 898 7247 Fax
kevin_hart@hp.com

REDACTED

Daniel R McClure
Thomas, Kayden, Horstemeyer & Risley L.L.P.
100 Galleria Parkway NW
Suite 1750
Atlanta GA 30339-5948

50819-1360

RE: Preparation of Patent Application

REDACTED

Entitled: Internet Graphics Appliance

HP Required Date: **REDACTED**

DOCKETED

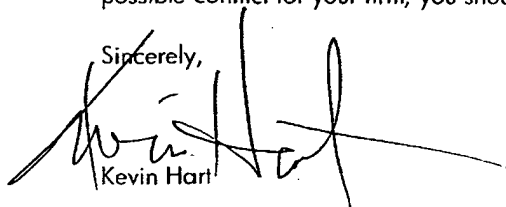
Dear Dan:

We would like you to : **REDACTED** prepare a US Patent application based on the HP Invention Disclosure identified above, a copy of which is enclosed.

REDACTED

Thank you for your assistance in reviewing this invention disclosure. If your review indicates a possible conflict for your firm, you should advise us within one week of receipt of this letter.

Sincerely,


Kevin Hart

Enc.: HP Invention Disclosure
RFQ
Outside Counsel Checklist

REDACTED

McClure, Dan

From: HOCHMUTH,ROLAND (HP-FtCollins,ex1) [REDACTED]
Sent: Tuesday, June 19, 2001 12:33 PM
To: 'McClure, Dan'
Subject: RE: Second Draft of Patent Application for HP 10007641-1

Hi Dan, Here are my comments on the 2nd draft. The disclosure looks in real good shape. A couple of comments/changes below then we should be ready to file. Regards --Roland

REDACTED

REDACTED

>
> Please let me know if you have any further
> comments/revisions for
> this application.
>
> Dan
>
> Daniel R. McClure
> Thomas, Kayden, Horstemeyer & Risley, LLP
> 100 Galleria Parkway, N.W.
> Suite 1750
> Atlanta, GA 30339
> (770) 933-9500 (ext. 259)
> (770) 951-0933 (fax)
>
>
>
>
>
> -----Original Message-----
> From: HOCHMUTH,ROLAND (HP-FtCollins,ex1)
> [mailto: **REDACTED** .com]
> Sent: Friday, May 25, 2001 12:45 PM
> To: 'McClure, Dan'
> Cc: MARKS,JOHNNY (HP-FtCollins,ex1); MARTIN,PAUL (HP-FtCollins,ex1)
> Subject: RE: Draft of Patent Application for HP 10007641-1
>
>
> Hi Dan, John Marks and I have reviewed the patent. The
> changes and comments
> are highlighted in the patent application attached below.
> Overall, things
> look real good! Paul will be back next week and may have
> additional comments
> and/or changes. ?

REDACTED

> Regards --Roland
>
> > -----Original Message-----
> > From: McClure, Dan [mailto:dan.mcclure@tkhr.com]
> > Sent: Monday, May 21, 2001 9:53 AM
> > To: ROLAND HOCHMUTH (HP-FtCollins,ex1) (E-mail)
> > Cc: L. Joy Griebenow Esq. (E-mail)
> > Subject: Draft of Patent Application for HP 10007641-1
> >
> >
> > <<Patent Application.doc>> <<Drawings.PDF>>
> > Roland:
> >
> > We have now completed a first draft of the patent
> > application for HP
> > 10007641-1, and we attach a password-protected version hereto
> > (password to
> > be provided in later email). Please review the attached
> > application and
> > drawings for both completeness and technical accuracy.
> > Please forward the

> > attached documents to the co-inventors (John Marks and Albert
> > Paul Martin)
> > for their review and comment as well. We will look forward
> > to receiving
> > your comments or suggestions. In this regard, please feel
> > free to insert
> > comments directly into the document, or call me to discuss,
> > whichever is
> > easiest for you.
> >
> > Sincerely,
> >
> > Dan
> >
> > Daniel R. McClure
> > Thomas, Kayden, Horstemeyer & Risley, LLP
> > 100 Galleria Parkway, N.W.
> > Suite 1750
> > Atlanta, GA 30339
> > (770) 933-9500 (ext. 259)
> > (770) 951-0933 (fax)
> >
> > =====
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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

ATTORNEYS AT LAW

INTERNATIONAL PATENT, TRADEMARK AND COPYRIGHT LAW AND RELATED LITIGATION

GEORGE M. THOMAS
JAMES W. KAYDEN
SCOTT A. HORSTEMEYER, P.C.
STEPHEN R. RISLEY
JEFFREY R. KUESTER
DANIEL R. MCCLURE
DANIEL J. SANTOS
DAN R. GRESHAM

June 27, 2001

ROBERT E. STACHLER II
J. SCOTT CULPEPPER
MICHAEL J. TEMPEL
DAVID R. RISLEY
JON E. HOLLAND
M. PAUL QUALEY, JR.
ROBERT P. BIDDLE*
JENNIFER M. GRUBER
PETER A. NIEVES
WILLIAM F. HEINZE*
RAYMOND W. ARMENTROUT*
ROBERT A. BLAHA
CYNTHIA J. LEE
N. ANDREW CRAIN
MONICA H. WINGHART
LAWRENCE E. THOMPSON
ROBERT B. DULANEY III
CHRISTOPHER B. UNDER, Ph.D.
KENNETH C. BRULEY
SAMI O. MALAS
NISHITKUMAR PATEL
DAVID RODACK*

DAVID P. KELLEY*
OF COUNSEL

PETER V. D. WILDE*
OF COUNSEL, VA OFFICE
* OTHER BARS ONLY

ERIC M. RINGER, Ph.D.
CHARLES E. THORPE, JR.**
GINA M. SILVERIO**
ADAM E. CRALL
GINA C. CHENG**
CHARLES W. GRIGGERS**
PATENT AGENTS

** PROVISIONALLY REGISTERED

ROBERT J. STARR
SAM HAN, Ph.D.
TROY VAN AACKEN
TECHNICAL ADVISORS

<http://www.tkhr.com>
e-mail: office@tkhr.com

Tel: 770-933-9500
Fax: 770-951-0933 (main)

Mr. Paul Pross
Patent Providers
2001 Jefferson Davis Highway
Crystal Plaza 1, Room 302
Arlington, VA 22202

Via Federal Express

RE: Novelty Search for:
System and Method for Communicating Graphics over a
Computer Network
Our Ref. 50819-1360

Dear Mr. Pross:

I would like to commission an expedited novelty search on the enclosed subject matter. In this regard, I enclose a draft of a patent application that we are considering filing. Before filing, however, our client has requested a patentability search so that we can identify the closest prior art, and revise the patent application accordingly (before filing).

REDACTED

REDACTED

Please don't hesitate to call if you have any questions about the scope of this search.

Sincerely yours,

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**

A handwritten signature in cursive script, appearing to read "Daniel R. McClure".

Daniel R. McClure

DRM/Enclosure

PATENT PROVIDERS

2001 Jefferson Davis Highway
Suite 302
Arlington, VA 22202

Tel: (703) 415-2518

Fax: (703) 415-2520

July 11, 2001

Daniel R. McClure
Thomas Kayden Horstemeyer & Risley
100 Galleria Parkway, N.W.
Suite 1750
Atlanta, Georgia 30339-5948

**RE: Novelty Search for:
System and Method for Communicating Graphic over a
Computer Network
Your Ref: 50819-1360**

Dear Mr. McClure:

Thank you for your request of June 27, 2001 regarding a novelty search on the above subject.

REDACTED

Your attention is directed to the following patents which have been highlighted for your convenience:

REDACTED

Daniel McClure
July 11, 2001
50819-1360
Page -2-

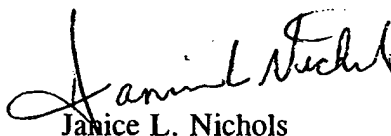
We make every effort to turn up the best art in the time authorized. We are limited by missing patents, misfiled patents, misclassified patents and misinformation from Examiners as to fields of search. However, based on our many years of experience in all disciplines, we feel that this investigation should enable you to form a reasonable opinion as to the scope of the existing art.

REDACTED

If I can be of any further assistance, please let me know.

Yours truly,

PATENT PROVIDERS, INC



Janice L. Nichols

JLN/clh
encl.

> -----Original Message-----
> From: McClure, Dan [mailto:dan.mcclure@tkhr.com]
> Sent: Tuesday, July 24, 2001 8:53 AM
> To: 'HOCHMUTH,ROLAND (HP-FtCollins,ex1)'
> Subject: RE: Patent "System and Method for Efficiently Communicating
> Video Over a Network", Docket 10010901-1.
>
>
> Thanks Roland
>
> -----Original Message-----
> From: HOCHMUTH,ROLAND (HP-FtCollins,ex1)
> [mailto: **REDACTED** com]
> Sent: Tuesday, July 24, 2001 10:52 AM
> To: 'McClure, Dan'
> Subject: RE: Patent "System and Method for Efficiently Communicating
> Video Over a Network", Docket 10010901-1.
>
>
> Hi Dan, I wanted to go through the hardcopies of the patent
> before rendering
> my final verdict and also have Paul Martin review the these
> patents as well.
> The problem with the WEB patent database tools is that the
> entire patents
> are not available and figures are often missing. I just received the
> hardcopies on Friday and Paul took them over the weekend for
> review. I'll
> check in with Paul as soon as he gets in. Possibly today or
> tomorrow I'll
> get to review the patent.
>
> Regards --Roland
>

REDACTED

-----Original Message-----

From: HOCHMUTH,ROLAND (HP-FtCollins,ex1) [mailto: **REDACTED**]

Sent: Tuesday, July 24, 2001 7:09 PM

To: 'McClure, Dan'

Cc: MARTIN,PAUL (HP-FtCollins,ex1); MARKS,JOHNNY (HP-FtCollins,ex1)

Subject: RE: Patent "System and Method for Efficiently Communicating Video Over a Network", Docket 10010901-1.

Hi Dan, Paul and I reviewed the patents.

However, there were enough differences that we believe that we are in the clear. The main points that we would like to see added to our patent application are as follows:

REDACTED

Let me know if you want to have a meeting to discuss these concepts further. I should be available tomorrow, Wednesday morning, at after 10:30 MST which I believe is 12:30 your time. I think we are on track for a July patent filing. If you send out formal papers, I think is the new process, we can get them signed on this end and sent to you ASAP.

Regards --Roland

McClure, Dan

From: HOCHMUTH,ROLAND (HP-FtCollins,ex1) **REDACTED** m]
Sent: Wednesday, August 22, 2001 12:29 PM
To: 'McClure, Dan'
Subject: RE: Fourth Draft of HP 10007641

Hi Dan, John says okay. --Roland

> -----Original Message-----

> From: McClure, Dan [mailto:dan.mcclure@tkhr.com]

> Sent: Wednesday, August 22, 2001 10:04 AM

> To: 'HOCHMUTH,ROLAND (HP-FtCollins,ex1)'

> Subject: RE: Fourth Draft of HP 10007641

>
>
> Yes... I prepare the formal papers (which are done), and I
> send those along
> with the finalized application to HP... The HP admin will get
> the signatures
> and file the application from there.

>
> Both you and Paul have "oked" this application... Any word
> from John?...
> once he approves, I'll forward the finalized application to
> HP for filing.

> Dan

> -----Original Message-----

> From: HOCHMUTH,ROLAND (HP-FtCollins,ex1)

> [mailto: **REDACTED**]

> Sent: Wednesday, August 22, 2001 11:36 AM

> To: 'McClure, Dan'

> Subject: RE: Fourth Draft of HP 10007641

>
> Hi Dan, I reviewed the patent application and it looks real
> good to me. Did
> you find out the process for formal papers because it may
> have changed?

> Regards --Roland

> > -----Original Message-----

> > From: McClure, Dan [mailto:dan.mcclure@tkhr.com]

> > Sent: Tuesday, August 21, 2001 10:19 AM

> > To: ROLAND HOCHMUTH (HP-FtCollins,ex1) (E-mail); Paul
> > Martin (E-mail);

> > John Marks (E-mail)

> > Cc: L. Joy Griebenow Esq. (E-mail)

> > Subject: Fourth Draft of HP 10007641

> > <<Patent_Application_rev4.doc>> <<Patent_Application_cmp4.doc>>
> > <<Drawings_rev.PDF>>

> > Gentlemen:

> > I have made a fourth round of revisions to the draft
> > application for

> > HP 10007641, based principally upon comments received from

> > HP's managing

> > attorney. I attach hereto the revised version, as well as a
> > redlined copy
> > ("...cmp4") illustrating the changes made from the prior version.
> >
> > I want to thank each of you for your input on this
> > application (it's
> > been greatly appreciated)! Please let me know if any of
> > you have any
> > additional comments, or whether the application may be filed.
> > I will wait
> > to hear from each of you before finalizing the application.
> >
> > Sincerely,
> >
> > Dan
> >
> > Daniel R. McClure
> > Thomas, Kayden, Horstemeyer & Risley, LLP
> > 100 Galleria Parkway, N.W.
> > Suite 1750
> > Atlanta, GA 30339
> > (770) 933-9500 (ext. 259)
> > (770) 951-0933 (fax)
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